



## **Quick Guide for Mumps Specimen Collection and Testing**

If mumps is suspected, the local health department (LHD) or NJDOH can offer specimen collection guidance. Below is a one-page reference sheet. For more detailed guidance or information on test result interpretation, please refer to the Mumps Laboratory Testing FAQs found at: <http://nj.gov/health/cd/mumps/techinfo.shtml>

### **Specimen Collection**

CDC recommends that a buccal/oral swab and blood specimen be collected from all patients with clinical features compatible with mumps. Urine is not as desirable but is where the virus sheds last, so it can be collected later in the course of illness.

**Buccal/oral swab:** the preferred specimen for reverse transcriptase polymerase chain reaction (RT-PCR) detection or culture.

- Collect swab as soon as possible after parotitis onset. Most successful when specimens are collected within 3 days of parotitis onset; however, swabs may be positive in unvaccinated persons up to 9 days post onset.
- Use synthetic (non-cotton) swabs. Brands include Dacron® and Copan. This is the same type of swab used for influenza PCR testing. *Massage the parotid gland area (the space between the cheek and teeth just below the ear) for about 30 seconds prior to collection.*
- Place swabs in 2-3 ml of standard, commercially available viral transport medium (VTM). If VTM is not available, use sterile isotonic solution (e.g. phosphate buffered saline) in a sterile urine collection container or a blood collection tube that contains no gels or other agents.
- Keep specimens cold (4°C) and ship using ice packs.

### **Serologic testing:**

- Blood should be collected as soon as possible after parotitis onset.
- Collect 7-10 ml of blood in a red top or serum separator tube (red-speckled or gold).
- Keep specimens cold (4°C) and ship using ice packs.

### **Urine:**

- Urine can be collected later in the course of illness (no sooner than 4 days after the onset of symptoms and no later than day 12).
- Collect a minimum volume of 50 ml of urine in a sterile container.
- Keep specimens cold (4°C) and ship using ice packs.

### **Specimen Testing**

- Each specimen must be clearly labelled with the patient's name, date of birth, and date of collection.
- Mumps testing can be performed by commercial laboratories. Commercial laboratories have different testing capabilities based on specimen type; carefully check both the specimen type and the specific test to be requested.
- Specimens also may be submitted to the NJDOH Public Health and Environmental Laboratory (PHEL) for testing at CDC.
  - Approval for submission to PHEL can be coordinated through the LHD. Once submission is approved, the LHD can also assist with coordination of transport to PHEL.
  - Any specimen submitted to PHEL must be accompanied by a NJDOH SRD-1 form (<http://web.doh.state.nj.us/apps2/forms/> - write "Attention: Virology for forwarding to CDC" on the form). Incorrectly labeled specimens submitted to PHEL will be rejected and discarded.

In accordance with N.J.A.C. 8:57, mumps is reportable **within 24 hours of diagnosis** and should be reported to the LHD in the jurisdiction in which the patient resides.

Directory of LHDs in New Jersey available at: <http://www.state.nj.us/health/lh/directory/lhdselectcounty.shtml>

If unable to reach the LHD, please contact the NJDOH at 609-826-5964 during regular business hours.